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- Topical preparations for human skin irratations.
- A topical preparation for the aleviation of human skin irritationa, including chapping, reddening, and tenderness, contains 8 Hydroxy Quinoline Sulfate or Parachlorometaxylenol in a formulation of carrier ingredients. The topical formulations can be in wipe-on stick form, lotions, powders aerosols creams, ointments, jellies and oils. The formulations are useful in combatting diaper rash, not rash, hand and face chapping and other forms of minor human skin irritations.

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Applicant: TERAD International, Inc., Ogden, Utah 84401 U.S.A.

Title: Topical Preparations for Human Skin Irritations

This invention relates to topical preparations for aleviation of minor human skin irritations, including diaper rash.

parents have long recognized the discomfort caused to babies by the skin irritations known as diaper rash. When the breakdown of urea absorbed by a baby's diaper occurs, irritating combinations of ammonia result which cause skin irritation and can lead to serious skin infections of the baby's bottom if left untreated.

Numerous attempts have been made to ameliorate the adverse effects of diaper rash and similar skin irritations. Liberal use of talcum powder and other agents, such as baby oils and the like have been used for generations to absorb the urea and ammonia compounds or coat the baby's bottom to prevent or lessen the effects of the rash. More recently, creams, lotions and oils containing other ingredients have been prepared to treat diaper rash. Prior art attempts include those found in U.S. Patents Nos. 3,935,862; 3,964,486; 4,117,187; and 4,385,632. These and other preparations commercially available have been unsuccessful in doing more than reducing the adverse influence of the ammonia by-products of urea or in protecting the baby's bottom from prolonged exposure to the effects of ammonium compounds on the baby's skin.

However, once skin irritations, such as chapping, reddening, tenderness and the like, begin to appear, these preparations do little more than attempt to isolate the baby's skin until the body's natural healing processes reverse the irritation of the skin and the naturally healthy skin condition is gradually achieved.

It is therefore an objective of this invention to provide a preparation to aid in the care of skin irrita10 tions, such as chapping, rashes, reddening, tenderness and the like.

It is an additional objective of the invention to provide a topical preparation in a variety of carriers to 15 aid in caring for skin irritations.

These and other objectives which will become apparent are achieved with the invention described below.

- A topical preparation for the alevation of human skin irritations, including chapping, reddening, and tenderness, contains 8 Hydroxy Quinoline Sulfate or Parachlorometaxylenol in a formulation of carrier ingredients. The topical formulations can be in wipe-on stick form, lotions, powders, aerosols, creams, ointments, jellies and oils. The formulations are useful in combatting diaper rash, foot rash, hand and face chapping and other forms of minor human skin irritations.
- A number of formulations of the invention have been made which can be employed to aid in the care of minor human skin irritations. Several examples of preferred embodiments of the invention follow to illustrate the range

of formulations and the types of preparations available within the scope of the invention.

EXAMPLE No. 1

5

DIAPER RASH CONTROL STICK

	Contents	Percentage
	Mineral Oil	51.60
10	Polyethylene	15.00
	Petrolatum Jelly	
	"	15.00
	Talc	12.00
	Lanolin	3.00
	Allantoin .	1.00
15	Kaolin	1.00
	Titanium Dioxide	1.00
	8 Hydroxy Quinoline Sulfate	.30
	Iron Oxides	.05
	Fragrance	.05
20	•	

EXAMPLE No. 2

DIAPER RASH CONTROL STICK

25 .	Contents		Percentage
	Mineral Oil		51.60
	Polyethylene		15.00
	Petrolatum Jelly		15.00
	Talc		12.00
30	Lanolin		3.00
	Allantoin	~	1.00
	Kaolin		1.00
	Titanium Dioxide		1.00

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Parachlorometaxylenol	.30
Iron Oxides	.05
Fragrance	.05

5 EXAMPLE No. 3

DIAPER RASH LOTION

	Contents	Percentage
10	Water	68.59
10	Aloe	7.00
	Propylene Glycol	2.67
	Bee Pollen	1.50
	Collagen	.30
15	TEA	.90
15	Stearic Acid	4.00
		3.50
	Glyceryl Stearate	5.00
**	IPM	.80
	Cetyl Alcohol	.30
20	JoJoBa Oil	•
	Ergocalciferol	.10
	Tocopherol	.10,
	Macademia Oil	.10
	Herbs Tea	4.00
25	Germaben II	.83
	Fragrance	.01
	8 Hydroxy Quinoline Sulfate	.30
	o ulatoxi farmorrue parrace	

DIAPER RASH LOTION

5	Contents	Percentage
	Water	68.59
	Aloe	7.00
	Propylene Glycol	2.67
	Bee Pollen	1.50
10	Collagen	.30
	TEA	.90
	Stearic Acid	4.00
	Glyceryl Stearate	3.50
	IPM	5.00
15	Cetyl Alcohol	80
	JoJoBa Oil	.30
	Ergocalciferol	.10
	Tocopherol	.10
	Macademia Oil	.10
20	Herbs Tea	4.00
•	Germaben II	.83
	Fragrance	.01
	Parachlorometaxylenol	.30

25 EXAMPLE No. 5

DIAPER RASH AEROSOL TYPE

	Contents	Percentage
30	Water	68.59
	Aloe	7.00
	Propylene Glycol	2.67
	Bee Pollen	1.50

	Collagen	.30
	TEA	.90
	Stearic Acid	4.00
	Glyceryl Stearate	3.50
5	IPM	5.00
	Cetyl Alcohol	.80
	JoJoBa Oil	.30
	Ergocalciferol	•10
	Tocopherol	.10
10	Macademia Oil	.10
	Herbs Tea	4.00
	Germaben II	83
	Fragrance	.01
	8 Hydroxy Quinoline Sulfate	.30
15		

DIAPER RASH AEROSOL TYPE

EXAMPLE No. 6

20	Contents	Percentage
	Water	68.59
	Aloe	7.00
	Propylene Glycol	2.67
	Bee Pollen	1.50
25	Collagen	.30
	TEA	.90
	Stearic Acid	4.00
	Glyceryl Stearate	3.50
	IPM	5.00
30	Cetyl Alcohol	.80
	JoJoBa Oil	.30
	Ergocalciferol	.10
	Tocopherol	.10

	Mecademia Oil	•	.10
	Herbs Tea		4.00
	Germaben II		.83
	Fragrance		.01
5	Parachlorometaxylenol		.30

CREAM

10		
	Contents	Percentage
	Stearic Acid	4.00
	GMS	8.00
	Prop. Parobeu	.10
15	Mineral Oil	10.00
	Wickenol 163	2.00
	Solvlan 98	2.40
	Acetulan	1.60
	Vitamin E	.80
20	Avacado Oil	2.00
	Selione	.80
	Germall-115	.30
	Methylparabeu	.20
	Allantoin	.20
25	P Glycol	4.00
	Dowicil 200	.05
	Aloe	1.00
	Water	61.45
	TEA	.80
30	8 Hydroxy Quinoline Sulfate	.30

CREAM

5	Contents	Percentage
	Stearic Acid	4.00
	GMS	8.00
	Prop. Parobeu	.10
	Mineral Oil	10.00
10	Wickenol 163	2.00
•,	Solvlan 98	2.40
	Acetulan	1.60
	Vitamin E	.80
	Avacado Oil	2.00
15	Selione	.80
	Germall-115	.30
	Methylparobeu	.20
	Allantoin	- 20
	P Glycol	4.00
20	Dowicil 200	.05
	Aloe	1.00
	Water	61.45
	TEA	.80
	Parachlorometaxylenol	.30
25		

EXAMPLE No. 9

OINTMENT

30	Contents	Percentage
	Petrolatum	75.00
	Lanolin	24.70
	8 Hydroxy Quinoline Sulfate	.30

OINTMENT

5	Contents	Percentage
	Petrolatum	75.00
	Lanolin	24.70
	Parachlorometaxylenol	.30

10 EXAMPLE No. 11

JELLY

	Contents	Percentage
15	Water	94.03
	Aloe Powder	.25
	Prop. Glycol	3.00
	Carbopal ·	.80
	TEA	.90
20	Dowicil 200	.05
	Germaben II	.67
	8 Hydroxy Quinoline Sulfate	.30

EXAMPLE No. 12

25

JELLY

	Contents	() als	Percentage
	Water		94.03
30	Aloe Powder		. 25
	Prop. Glycol		3.00
	Carbopal		.80
	TEA		.90

		Dowicil 200	.05
		Germaben II	.67
		Parachlorometaxylenol	.30
	5 <u>EX</u>	EAMPLE No. 13	
•		POWDER	
		Contents	Percentage
]	10	Talc	99.00
		Methylparaben	.20
		Propylparaben	.20
		Allantoin	.30
		8 Hydroxy Quinoline Sulfate	.30
-	15	-	
	<u>E</u> 2	KAMPLE No. 14	·
		POWDER	
		-	Percenta <u>ge</u>
	20	Contents	99.00
		Talc	.20
		Methylparaben	.20
		Propylparaben Allantoin	.30
		Allancoin	
	25	Parachlorometaxylenol	.30
	25	Parachlorometaxylenol	.30
		Parachlorometaxylenol XAMPLE No. 15	.30
		XAMPLE No. 15	.30
	<u>E</u>		.30
		XAMPLE No. 15	Percentage
	<u>E</u>	Contents	
	<u>E</u>	XAMPLE No. 15	<u> Percentage</u>

8 Hydroxy Quinoline Sulfate -30 Fragrance -05

EXAMPLE No. 16

5

OIL

	Contents	Percentage
	Mineral Oil	98.00
10	Lanolin	1.65
	Parachlorometaxylenol	.30
	Fragrance	.05

- 15 While this invention has been described in a preferred embodiment, it will be understood that there are substantial equivalents which fall within the scope of the appended claims.
- 20 While as can be seen from the above examples a percentage of 0.30 of either 8 Hydroxy Quinoline Sulfate or Parachlorometaxylenol is preferred in all topical formulations, the percentage may vary between e.g. 0.1 and 0.5 and may be even higher as 0.5, e.g. 0.8. If a combination of 8 Hydroxy Quinoline Sulfate and Parachlorometaxylenol is used, the total content of both should preferrably be within the said limits.

Applicant: TERAD International, Inc., Ogden, Utah 84401 U.S.A.

Title: Topical Preparations for Human Skin Irritations

CLAIMS

- Topical preparation for human skin irritations, comprising in combination:
 - 8 Hydroxy Quinoline Sulfate; and/or Parachlorometaxylenol; and
- a carrier for said sulfate and/or xylenol suitable for topical application.
- A preparation as set forth in Claim 1, wherein said carrier ingredients comprise Mineral Oil, Polyethylene,
 Petrolatum Jelly, Talc, Lanolin, Allantoin, Kaolin,
 Titanium Dioxide, Iron Oxides and Fragrance.
- 3. A preparation as set forth in Claim 1 or 2, wherein said carrier ingredients comprise Water, Aloe, Propylene Glycol, Bee Pollen, Collagen, TEA, Stearic Acid, Glyceryl Stearate, IPM, Cetyl Alcohol, JoJoBa Oil, Ergocalciferol, Tocopherol, Macademia Oil, Herbs Tea, Germaben II, and Fragrance.
- 20 4. A preparation as set forth in Claim 1, 2 or 3, wherein said carrier ingredients comprise Stearic Acid, GMS, Prop. Parobeu, Mineral Oil, Wickenol 163, Solvlan 98, Acetulan, Vitamin E, Avacado Oil, Selione,

Germall-115, Methylparobeu, Allantoin, P Glycol, Dowicil 200, Aloe, Water, and TEA.

- A preparation as set forth in one of the Claims 1 to
 4, wherein said carrier ingredients comprise Pretrolatum, and Lanolin.
- A preparation as set forth in one of the Claims 1 to
 , wherein said carrier ingredients comprise Water,
 Aloe Powder, Prop. Glycol, Carbopal, TEA, and
 Germaben II.
- 7. A preparation as set forth in one of the Claims 1 to6, wherein said carrier ingredients comprise Talc,15 Methylparaben, and Allantoin.
 - A preparation as set forth in one of the Claims 1 to
 , wherein said carrier ingredients comprise Mineral
 Lanolin and Fragrance.

20

- A preparation as set forth in one of the Claims 1 to
 wherein said carrier ingredients comprise Dowicil
 200.
- 2510. A preparation as set forth in one of the Claims 1 to 9, wherein said carrier ingredients comprise Propylparaben.





DOCUMENTS CONSIDERED TO BE RELEVANT			EP 85104740.7	
Catagory		h Indication, where appropriate, earlt passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
х	* Example 23	484 (GAF CORP.) 3; page 3, lines ge 22, line 23 - line 22 *	1,2,5, 8	A 61 K 7/48 A 61 K 9/00 A 61 K 31/47 A 61 K 31/055
х	<u>US - A - 4 463</u> * Abstract;	O16 (N.L. BURGESS) examples *	1,10	·
х	tika und Riechs vol. 1, "Die ko stoffe" 1978 DR. ALFRED HÜT Heidelberg pages 188, 483	Handbuch der Kosme- stoffe" J ^d edition, osmetischen Grund- HIG VERLAG,		· .
	page 483 sulfat *	8-Hydroxychinolin-		TECHNICAL FIELDS SEARCHED (Int. Cl.4)
x		dition, vol. 2, toffe wissenschaft-	1-10	A 61 K 7/00 A 61 K 9/00 A 61 K 31/00
	VERLAG FÜR CHE ZIOLKOWSKY KG, pages 970-978	M. INDUSTRIE H. Augsburg		·
	* Pages 972	-978 * 		
		·	·	
· · · · · ·	The present search report has t	peen drawn up for all claime		
	Place of search VIENNA	Date of completion of the search 21-05-1986		IRMLER
Y : part doc A : tect	CATEGORY OF CITED DOCK sicularly relevant if taken alone sicularly relevant if combined warrent of the same category nnological background -written disclosure	### E : earlier pe after the f rith another D : documen L : documen	tent document Ning date it clied in the a it clied for othe	rhying the invention i, but published on, or pplication ir ressons



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EUROPEAN SEARCH REPORT

DOCUMENTS CONSIDERED TO BE RELEVANT			EP 85104740.7	
Category		ith Indication, where appropriate, went passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. CI.4)
х		N-PRESCRIPTION n, Pub. American Association, 1977	1	
	* Pages 321-	323 *		
A	DD - A - 123 64	O (G. SYDOW)	1	
A	<u>GB - A - 2 076</u> * Example *	286 (QUINODERM LTD.	1	
A	GB - A - 1 539 * Example 1	771 (QUINODERM LTD.	1	
A	<u>US - A - 4 485</u> * Example 1	091 (H. FITTON)	1 ,	TECHNICAL FIELDS SEARCHED (Int. Cl.4)
A	<u>US - A - 3 904</u> * Example 9	754 (J.V. MORELLE) *	1	
A	tika und Riechs vol. 3, "Die Kö 1973 DR. ALFRED HÜTH Heidelberg	andbuch der Kosme- stoffe" 2 rd edition, erperpflegemittel"	1-10	
	pages 494-499		•	,
	The present search report has t	een drawn up for all claims	1 .	
	Place of search VIENNA	Date of completion of the search 21–05–1986		Examiner IRMLER
Y : part doc: A : tech O : non-	CATEGORY OF CITED DOCL icularly relevant if taken alone icularly relevant if combined w ument of the same category inological background -written disclosure rmediate document	E: earlier pei after the fi D: document L: document	ent document, ling date cited in the ap cited for other f the same pate	lying the invention but published on, or plication reasons int family, corresponding